Commonwealth of Kentucky Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: April J. Webb / Rebecca T. Cash

<u>General</u> l	<u>Information</u>					
	ame:		ia Products Inc.			
	ddress:		Tyrone Pike, Versailles, KY 40383			
	ate application receive		, 1997			
	IC/Source description:	3641				
	FS Plant ID:	21-239-00013				
_	IS #:	102-4140-001	3			
	pplication log number:	F452				
Р	ermit number:	V-99-032				
<u>Applicatio</u>	n Type/Permit Activity					
	() Initial issuance		[] General permit			
[] Permit modification		[] Conditional major			
	Administrative	е	[X] Title V			
	Minor		[] Synthetic minor			
	Significant		[] Operating			
l] Permit renewal		[] Construction/operating			
. [ce Summary] Source is out of com (] Compliance certifica		mpliance schedule included			
	e Requirements list					
] NSR	[]NSPS	[X] SIP			
[] PSD	[]NESHAPS	[] Other			
Miscellan	eous					
] Acid rain source					
j.	[] Source subject to 112(r)					
[] Source applied for fe	derally enforceable em	nissions cap			
		ns for alternative opera	iting scenarios			
] Source subject to a M					
	[] Source requested case-by-case 112(g) or (j) determination					
		new control technolog	уу			
	[X] Certified by responsible official					
	[X] Diagrams or drawings included					
		s information (CBI) sub	omitted in application			
	Pollution Prevention					
L] Area is non-attainme	nt (list poliutants):				

Emissions Summary

Pollutant	Actual (tpy)	Potential (tpy)
PM	36.32	305.292
SO ₂	5.337	5.85
NOx	17.43	35.08
СО	3.754	7.48
VOC	1841.804	1841.804
LEAD	0.00037	0.131
HAP ≥ 10 tpy (by CAS)		
Xylene	1341.73	1341.73

Source Process Description:

The process begins with washing the glass tubes received from an glass adjacent plant with deionized water. The insides of the tubes are coated with a water / phosphor based solution. Rotating brushes scrape off excess coating at the end of the tubes. The tubes are then transferred on a conveyor belt to a natural gas fired baker where the coating is baked into the tube in the presence of sulfur dioxide. After the baker unit, the end of the tubes are fitted with cathode fixtures, in which, the filament and a narrow glass tubing are fitted into the tube. A vacuum pump is used to evacuate the tube, where it is purged with nitrogen followed by argon gas. Mercury is then injected and evaporated out of the tube. The tubes are then molded to shape and sent to the base fill line. At the base fill, the tubes are mounted with bakelite and sent to the automount division and fitted with the cathode.